

**REMARKS**

This amendment is in response to an Interview on April 18, 2007 (Paper No. 20070418) and in response to the Final Office action (Paper No. 20070307) mailed 12 March 2007. Claims 34-53 are pending. Applicant has amended claim 39 by this amendment.

In the Final Office action of Paper No. 20070307, the Examiner deemed that claims 34-38 and 43-46 are allowed, but the Examiner maintained his rejection of claim 39 and its depending claims 40-42 and 47-53 as being rejected under 35 U.S.C. §102 for alleged anticipation by Baughman *et al.* (US 5,387,314). At the Interview on April 18, 2007, the rejection of claims 39 and depending claims 41, 42, 47 and 50 were discussed. At this Interview, it was agreed that the rejection of claims 41, 42 and 50 were overcome by Applicant's December 8, 2006 arguments.

Furthermore, it was agreed at the April 18, 2007 Interview that if Applicant amended claim 39 in one of two ways, claim 39 and all of its depending claims would be instantly allowed. Specifically, it was agreed that if Applicant amended the second to the last limitation of claim 39 to read, "forming a plurality of chamber walls over the substrate, wherein ones of the plurality of chamber walls separate one pair of resistive heater elements from another pair of resistive heater elements;" claim 39 would be instantly allowed. *It was further agreed that such an amendment after Final would be entered as it would not incur further search or consideration.* Applicant is hereby relying on this agreement of the April 18, 2007 Interview and is amending the second of the last limitation accordingly by this amendment. As a result, Applicant expects in return an Instant Notice of Allowance for all pending claims.

Applicant is further entering, for the record, why Applicant believes that the rejection of claims 39 as well as 41, 42, 47 and 50 in Paper No. 20070103 are entirely without merit by repeating Applicant's December 8, 2006 traversal for 5 limitations in claims 39, 41, 42, 47 and 50 respectively:

**Prior Art Rejections**

In Paper Nos. 20060908 and 20070103, the Examiner rejected claims 39-42 and 47-53 under 35 U.S.C. §102 for alleged anticipation by Baughman *et al.* (US 5,387,314). Applicant has the following comments.

**1) Regarding Applicant's claim 39**, Applicant claims, "forming barrier walls over the substrate, the barrier walls separating pairs of patterned resistive heater elements from each other". In Paper Nos. 20060908 and 20070307, the Examiner equates reference numeral 16 of Baughman with Applicant's resistive heater element(s) and reference numeral 17 of Baughman with Applicant's barrier or chamber walls. Then, on Page 4 of Paper No. 20060908, the Examiner states that this limitation is taught by FIGS. 1, 2a, 2b and 3 of Baughman. Applicant disagrees.

Applicant submits that each of FIGS. 1, 2a, 2b and 3 of Baughman clearly shows that the layer 17 separates individual resistive heater elements 16 from each other. Applicant submits that the resistive heater elements in Baughman are not paired off as in Applicant's claimed invention. Applicant submits that in Baughman, there is a one-to-one correspondence between the chambers 15 and the resistive heater elements 16. Therefore, Applicant submits that Baughman can not

possibly anticipate Applicant's claim 39.

**2) Regarding Applicant's claim 41**, Applicant claims, "the resistive heater elements being formed in pairs, wherein barrier walls serve to separate one pair of resistive heating elements from another adjacent pair of resistive heater elements". On Page 5 of Paper No. 20060908, the Examiner addresses this limitation by saying, "As applied to claim 41, Baughman et al disclose the resistive heater elements being formed in pairs (16, Fig. 2a), wherein barrier walls (15) serve to separate one pair of resistive heating elements from another adjacent pair of resistive heater elements." Applicant disagrees. To begin with, Applicant submits that reference numeral 15 in Baughman is an ejection chamber, not a barrier wall. Furthermore, Applicant submits that Fig. 2a of Baughman shows resistive heater elements 16 being formed individually and not as pairs. Therefore, Applicant submits that Baughman can not possibly teach Applicant's claim 41.

**3) Regarding Applicant's claim 42**, Applicant claims, "said electrode layer is deposited so that each pair of resistive heaters are electrically connected in series". On Page 5 of Paper No. 20060908, the Examiner addresses this limitation by saying, "As applied to claim 42, Chan et al discloses the electrode layer as read lead (24a, Fig. 2a) is deposited so that each pair of resistive heaters as lead (24a) are electrically connected in series (see sequence Fig. 1, 2a,-2b and Fig. 3)". Applicant disagrees. To begin with, Chan is not used to reject Applicant's claims in Paper No. 20060908. Second, Applicant objects to the Examiner equating reference numeral 24a of Baughman with Applicant's electrodes. Applicant submits that reference numeral 24a of Baughman is a lead-in lobe that allows ink to flow in easier from ink fill slot 18 through ink feed channel 14. Further,


element 24a of Baughman is not shown as being connected to any resistive heater element 16. Applicant further submits that Baughman does not illustrate or discuss electrodes. Even further yet, Baughman does not teach or illustrate resistive heater elements as being in pairs. And still further, Baughman lacks a teaching of connecting any resistive heater elements in series. Therefore, Applicant submits that Baughman can not possibly teach Applicant's claim 42.

**4) Regarding Applicant's claim 47 and 50,** Applicant claims, "the barrier walls being adapted to group together said plurality of resistive heater elements in pairs" and **5)** "wherein there is a two to one correspondence between the resistive heater elements and the nozzle holes". On Page 5 of Paper No. 20060908, the Examiner states that these limitations are taught by resistive heater elements 16 and nozzle holes 20 of Baughman. Applicant disagrees. Applicant submits that Baughman clearly teaches that there is a one-to-one correspondence between resistive heater elements 16 and nozzle holes 20 and that single resistive heater elements are surrounded by the barrier walls 17. Furthermore, the text of Baughman states at col 3, line 67 through col 4, line 1, "Associated with the resistor 16 is a nozzle, or convergent bore, 20, located near the resistor in a nozzle plate 22." Also, col 4, lines 18-20 of Baughman state, "Each orifice 20 is thus seen to be operatively associated with an resistor 16 for ejecting as quantity of ink ...". Therefore, Applicant submits that Baughman can not possibly teach either of Applicant's claims 47 or 50.

In view of the above, it is submitted that the claims of this application are in condition for allowance, and early issuance thereof is solicited. Should any questions remain unresolved, the Examiner is requested to telephone Applicant's attorney.

No fee is incurred by the filing of this amendment.

Respectfully submitted,

  
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